



**University
of Victoria**

Centre for
Advanced
Materials &
Related
Technology

CAMTEC SEMINAR

DATE: Friday, September 25th, 2015

TIME: 10:30 – 11:30 am

LOCATION: Engineering Office Wing, Room 430

SPEAKER: **Dr. Moritz Riede**
University of Oxford

TITLE: *Organic Photovoltaics: Quo Vadis*

Abstract: Organic Photovoltaics has attracted increasing attention from academia and industry in recent years. Although this emerging solar technology has lower power conversion efficiencies than most of their inorganic counterparts, it has potentially much lower cost due to low material consumption and scalable vacuum or solution-based processing methods for large area coatings. Furthermore, organic photovoltaics offers interesting possibilities for flexible, semitransparent and light-weight devices, enabling novel applications for harnessing the power of the sun. To get to the current ~10% power conversion efficiencies required tuning the properties of the organic semiconductors and the internal microstructure of the photovoltaic active layer as well as optimisation of the stack architecture. Recent results on understanding the working principles as well as on the optimisation of vacuum processed organic photovoltaic devices will be presented. To further increase the power conversion efficiencies, it will be crucial to additionally reduce the energy losses of the charge carriers during solar energy conversion and first strategies will be shown.

Please contact Peggy White for further information: (250) 721-7736